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Recycling Fashion

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Americans tend to think of items they purchase as disposable, and when items become damaged or broken, they are thrown in the trash instead of being fixed or reused. Each year, Americans dispose of huge quantities of items in the trash and that trash is then sent to landfills. Ohioans alone disposed of 17.46 tons of waste in 2019 which then ended up in landfills or incinerated (Ohio Environmental Protection Agency, 2021). If more items were recycled, fewer items would be sent to landfills, creating more space, and reducing the chances of harmful chemicals leaking into the surrounding land. One such item that could potentially be recycled but is currently recycled at a low rate is clothing. In the United States, nearly 13 million tons of textiles are thrown away each year, which accounts for almost 9 percent of non-recycled waste (Frazee, 2016). Fast fashion is essentially a case of planned obsolescence, as fashion designers and companies frequently change designs and styles, causing consumers to want to purchase more clothing to keep up with the trends, even when old clothing is not worn out (Frigato & Santos-Arteaga, 2016). Many clothing items could be recycled in one way or another, reducing the amount of greenhouse gas emissions, lessening the use of water, and reducing the amount of energy required to create new garments (Robertson, 2014, p. 275).

Fashion Disposal and the Environment

In the era of fast fashion, American consumers are able to purchase a large amount of clothing for not very much money. On average, Americans purchased 62 pieces of clothing in 2011, which would not be possible without low costs and a large supply of clothing from overseas (Weber, 2017). Fast fashion and low prices allow consumers to keep up with fashion trends, but it also creates a large amount of over production. The garments that are considered out of fashion are quickly discarded in the trash can, even if there is plenty of useful life left in the fabric and the items could have been donated to a local charity for use. People throw items away in the trash can quickly instead of saving them to donate or recycle because unused and unwanted items sitting around the house cause consumers to become uncomfortable about their consumption levels (Ekström & Salomonson, 2014). People do not like to think that they are wasting money on something, so they want it out of sight as quickly as possible. Companies make a profit by creating an overabundance of cheap clothing, so there is no incentive to use more environmentally friendly methods of production, nor is there an incentive to create fewer

goods to lower the environmental impact of clothing creation. Clothing is so cheap to produce that even items sold deeply discounted can turn a profit for the company selling the goods. This has led to a call for the government to create a policy to help control the waste of clothing, similar to the tax on plastic bags in Italy, which reduced use of plastic bags by nearly 90% (Ekström & Salomonson, 2014). The combination of government regulation and a government sponsored recycling program could help to greatly reduce the environmental impact of clothing by reducing the need for the two most common methods of disposal for clothing: landfilling and incineration.

Landfills require a large area of open land, into which a large hole is dug, and waste is deposited. Landfills have methods to try to contain harmful materials from escaping, such as liners, but this is not a guarantee that there will not be any leaks that are disastrous to the environment. The best way to avoid these dangerous chemicals is to keep items out of the landfill in the first place. With many landfills being reused for public spaces, such as parks, after the landfill is full it seems logical to keep as many potentially harmful items out of landfills as possible, to protect the people and children utilizing the space (Robertson, 2014, p. 270). Some items that can be extremely harmful to the environment are already being collected for alternate disposal, such as batteries and lightbulbs, but clothing has no alternate disposal method despite its potential negative environmental impact (Weber, 2017). Having an alternate disposal method helps to keep environmental and social impact to a minimum. With items such as batteries already being collected to protect people and the environment, it does not seem too outrageous to do the same with clothing, considering the negative effects that clothing can have in a landfill. Synthetic materials, such as polyester, are made of plastic and are not biodegradable. This means that any polyester item, which makes up a majority of clothing items created today, can more than 100 years to break down and will remain in landfills indefinitely (Weber, 2017). On the other hand, natural fibers, such as wool or cotton, will biodegrade in a landfill, but the breaking down of these natural fibers can result in materials that are harmful to the environment, such as acid leachate, methane gas, nitrogen gas, and hydrogen sulphate (Weber, 2017). When not sent directly to the landfill, some clothing items may be sent to be incinerated.

Clothing items are often incinerated in waste-to-energy programs, where waste items are burned and used to generate electricity. Although using waste items to create new energy is a

good idea, there are some issues with this method. First, the energy collected from burning is nowhere near the amount of energy needed to create the waste items in the first place. Burning clothing items with carbon containing items can create dioxins, which are chemical compounds harmful to human health (Robertson, 2014, p. 271). Burning items produces ashes that then still end up in landfills, and the resulting ashes contain heavy metals, which can also cause health issues when leaking into surrounding groundwater (Robertson, 2014, p. 271). Burning synthetic materials, such as polyester, is essentially the same as burning fossil fuels, as polyester and plastic are made from fossil fuels. Creating a program and jobs to keep clothing items out of landfills and incinerators is far better for the environment than continuing to throw out copious amounts of clothing. Although disposing of clothing has many negative effects on the environment, there are several issues which keep many clothing items from being recycled: the large amount of manpower needed to support clothing recycling initiatives, the ease of recycling for consumers, and the method of recycling these unwanted clothing items.

A Job Guarantee Proposal

One major issue with recycling clothing, the lack of manpower, could be solved by a government job guarantee program. A government job guarantee program would make sure anyone and everyone who wanted a job would be placed into a job, and that job would come with fair wages and other benefits, such as health insurance. By creating a job guarantee program for recycling clothing, finding manpower to recycle clothing would no longer be an issue, as there are many people looking for work at any given time. Around 68% of Americans believe that the government should make sure people are employed if they want to work, and the goal of a job guarantee is making sure those who want work can find it (Tcherneva, 2020, p. 116). Not only would clothing recycling generate jobs of various types, but a recycling program for clothing would also support green initiatives and lower greenhouse gas emissions due to the fashion industry. The job guarantee becomes even more popular with the public when the jobs created support green initiatives and recycling is considered a green initiative (Tcherneva, 2020, p. 116). Choosing to recycle clothing rather than either placing the items in a landfill or incinerating them, has a great impact on the environment and the people living in the surrounding areas. With the large amount of clothing Americans purchase and discard each year,

recycling used clothing can help save the environment and workers can help ensure used clothing items are being utilized to their full potential.

The first process needed to create a clothing recycling program is a way to collect the unwanted clothing from consumers. There are several methods that could be used to collect the discarded clothing. The first would be to set up donation boxes around towns. Some non-profit organizations, such as the Special Olympics, already use this method of collection. There are some issues with this method though. If collection bins are full, people tend to leave numerous bags of clothing and other items sitting around the bins, although the bins specify not to do this. This method can also make collecting goods difficult if donations are not secured in bags before being placed into the collection bins. Collection bins may not be the best choice to collect clothing, as studies show that people recycle when it is convenient and accessible, and driving to a collection area is more difficult than just throwing items in the trash (Weber, 2017). There is also the chance collection bins can collect water inside them, making the clothing placed within them heavier and more difficult to handle by the haulers and sorters. A more convenient way for consumers to recycle clothing would be by placing in designated bags, like one would currently do with plastic, paper, or glass. Then workers from the job guarantee could collect the items on designated days, with little effort on the part of the consumer. It might also be possible for the clothing recycling center to make a deal with a local recycling hauler, having a group which is already going around and collecting recycling pick up the bags of clothing, and having the clothing dropped at a predetermined site (Robertson, 2014, p. 274). This would reduce the effort needed on the part of the consumer, as it is no more difficult than throwing the items in the trash. After the clothing is collected, it then needs to be sorted based on how it is to be recycled or reused.

There are several different ways to utilize unwanted clothing. First, clothing items can be reused, which means items are used for the original purpose of the item, such as selling at a secondhand store, participating in a swap, or donating items for use for the less fortunate (Ekström & Salomonson, 2014). Second, clothing items can be recycled, which means the clothing items are used for their material properties, and items are taken apart and pieces are turned into something else (Ekström & Salomonson, 2014). Some examples of this are using fire retardant material in mattress spring covers or turning excess military stock to create bags. This

use of recycled clothing could help create a market for recycled clothing, as negative views on reused clothing mean there is not a large market for recycled goods (Robertson, 2014, p. 275). Although secondhand use of clothing may have a bad image, creating something new from the fabric may help opinions of reused garments. There are also a few places that utilize used clothing in was other than reuse or refashioning, which are more expensive and more difficult, which will also be discussed later.

In order to recycle clothing, regardless of how the clothing items will be used in the future, clothing needs to be sorted to recycle the items in the most effective manner. This takes a large amount of manpower, which makes it ideal for a job guarantee position. The sorting of clothing is one of the main reasons a national clothing recycling program does not currently exist because the sorting requires a large amount of labor and it can be very expensive (Ekström & Salomonson, 2014). Clothing items need to be sorted based on the condition of the clothing and the fiber type in order to recycle the clothing in the most beneficial way. Some of the ways to reuse clothing include selling them in a second-hand clothing store, recycling the fabric by using it in a different item, or using worn out clothes as insulation. Those clothing items that will be used in a way other than selling the garment as in such as in a secondhand clothing store, will need to have other items like buttons, zippers, and rivets removed before being recycled, which also needs manpower to remove all the extra items by hand. Once items are sorted and the other notions are removed from the garments, the clothing is ready to be recycled or reused.

The simplest way to repurpose used clothing is to reuse it. Items that are generally in good shape and are still useable can be sent to a secondhand store to be resold for a low price. The secondhand store could also be another way to create jobs for a job guarantee, as people will be needed to stock the store and work at the cash register. In recent years, especially with the younger generations joining the workforce and looking for business clothing, it has become much more socially acceptable to shop and purchase clothing from secondhand or consignment shops. This is much cheaper, and it is also much more environmentally friendly than going to a department store and purchasing a new piece of fast fashion. Another way to use garments that are still in good condition would be to donate the items to various charity organizations. Some places that accept donations of gently used clothing could be places like homeless shelters, foster organizations, women's shelters, and disaster relief organizations like the Red Cross. These types

of organizations provide free clothing for those who are in need and may not have the means to get completely new clothing, and this would also help reduce the demand for new clothing.

If the recycled clothing is in decent shape, but possibly has some worn spots or holes, it is possible to recycle the fabric into something else. Historically, it was extremely common for clothing items to be recycled into something else, such as rugs, pillows, or furniture (Ekström & Salomonson, 2014). Fabric was, and still is, expensive and items that could still be used were not discarded, they were refashioned into something else, which is one reason why historic clothing can be difficult to come by. Some ideas for refashioning clothing that is in good shape but may have some damage that makes it so it cannot be resold would be creating different clothing items, children's clothing, pillows, furniture cushions, and various types of handbags (Ekström & Salomonson, 2014).

Refashioning clothing into something else greatly increases the expected life of a piece of clothing, plus it also helps to create even more jobs for a job guarantee. Employees can be trained to cut and sew different items, which also gives the employee additional training which could help them find a different job in the private sector. The items created by the employees can then be sold, helping to offset the costs of the job guarantee. There are a few private sector businesses who do something similar, such as Rewilder, who recycled car covers used to ship vehicles on boats and turning the covers into jackets (Greenstein, 2019). Without the creativity of Rewilder, the covers would have been used once and then thrown in the trash to be sent to a landfill or incinerator. Some types of material that may not be great for handbags or new clothing items, such as sweatshirts and sweatpants, could also be cut up to be used as shop rags for different factories and businesses. This keeps new materials from being made solely for the purpose of being used to clean up grease and other messy uses. These shop rags can be washed and reused many times as they do not need to look good to be used, they just need to serve the purpose they were intended for. There are also ways to recycle clothing that is not good enough to refashion or repurpose into something else.

IF some textiles received and sorted and they are deemed unable to be reused in one of the above ways, they are still able to be reused. These items can be shredded and used as insulation for houses or as furniture padding (Ekström & Salomonson, 2014). This fabric insulation is not only good for helping to keep houses warm, it is also good to help keep noise

levels down. One company, Goodlife Clothing, has started a program within their own company to recycle clothing in this method. They call it the Goodlife Loop (Palmieri, 2020). Goodlife encourages customers to bring in old and unwanted clothing, and this clothing is shredded for insulation for houses, helping to offset the environmental impact of the company. Worn out clothing can also be cut into strips or shredded for use as furniture padding. The fabric will not be seen when being used for either insulation or as furniture padding, so the state of wear and the appearance of the clothing would not matter for either one of these options. Manpower would still be needed to remove the buttons, zippers, and other miscellaneous items from the clothing which provides jobs. Manpower is also needed to shred or cut fabric, and package and ship the fabric from the sorting location to places where it can be used.

A final but less feasible opportunity for job creation and fabric recycling is to utilize not the fabric from the clothing, but the individual fibers. It is possible to take the fibers from recycled clothing and create new fabric from the fibers (Ekström & Salomonson, 2014). Since fibers are being reused, it reduces the carbon footprint of the fabric and reduces other resources, such as farmland or oil, that are required in order to create fabric. There is a company in Japan named Jeplan which has come up with a way to recycle polyester fabrics. Using recycled clothing to generate polyester fabric uses about half the carbon dioxide emissions that would be used when creating brand new fabric (Alpeyev, 2017). One issue Jeplan is having is finding enough polyester clothing each year to sustain their operations. Jeplan needs around 30,000 tons of polyester fabric each year for their factory (Alpeyev, 2017). A government sponsored job guarantee could help by picking up unwanted clothing, sorting the polyester clothing out, and selling these items at a reasonable rate to companies like Jeplan who have the means to recycle polyester clothing, but struggle to find enough clothing items to recycle. Like polyester fabric, Jeplan has also found a way to recycle cotton fibers. Jeplan can turn cotton fibers into fuel (Alpeyev, 2017). About 700 liters of ethanol can be created from one ton of cotton fibers. Although it may not be feasible for the job guarantee to create a business to recycle polyester into new fabric or create ethanol from cotton, some of the clothing items that are being sorted could potentially be sold to a separate company for those uses.

With the climate change issue becoming more and more urgent, one way people can lessen their impact is by recycling or reusing clothing. With a large influx of clothing being

recycled instead of thrown into the landfills, many jobs could be created. Clothing needs to be sorted for use to get the most out of the garments. Any type of plastic or metal, such as zippers, buttons, or rivets, would need to be removed by hand for any items being refashioned or shredded, creating jobs. Fabrics from the clothing could then be used to make new items, which means employees could be provided training on how to sew, which could be useful for finding a private sector job. The created items could be sold, helping the job guarantee to pay for itself. Overall, the introduction of a clothing specific recycling program would both help to create jobs and help to reduce the environmental impact of fashion.

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